

Asparagine-linked sugar chain in the cultured product; and
collecting the glycoprotein from the cultured product.

31. (New) The yeast mutant according to claim 2, wherein the auxotrophic mutation trait is selected from ura3 mutation, his3 mutation, leu2 mutation, ade2 mutation, trp1 mutation, and can1 mutation.

32. (New) The yeast mutant according to claim 16, wherein the auxotrophic mutation trait is selected from ura3 mutation, his3 mutation, leu2 mutation, ade2 mutation, trp1 mutation, and can1 mutation.

REMARKS

Amendments have been made the application and new claims have been added to remove the multiple dependent claims. Therefore, it is requested that these claims now be incorporated in the present application and that no new matter has been added. Applicants also respectfully request that the foregoing amendments be made prior to examination of the present application.

Applicant believes that the present application is now in condition for allowance. Favorable consideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

By 

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Version with Markings to Show Changes Made

IN THE CLAIMS:

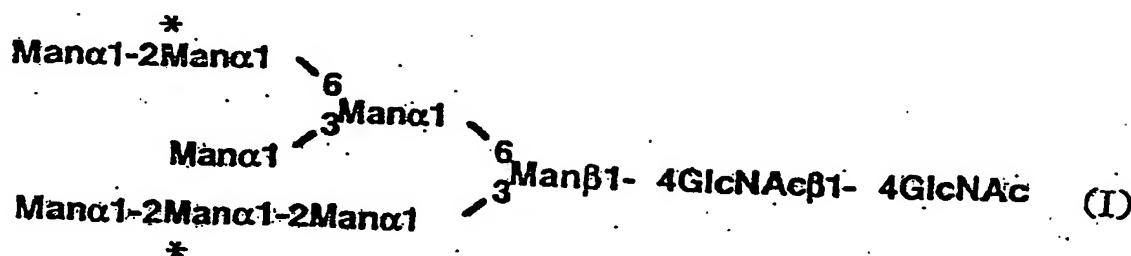
The following amendments have been made:

3. (Amended) The yeast mutant according to claim 1 [or 2], wherein the auxotrophic mutation trait is selected from ura3 mutation, his3 mutation, leu2 mutation, ade2 mutation, trp1 mutation, and can1 mutation.

7. (Amended) A process for producing an oligosaccharide, comprising the steps of:

culturing the yeast mutant according to [any one of claims 1 to 6] claim 1 in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide represented by formula (I):

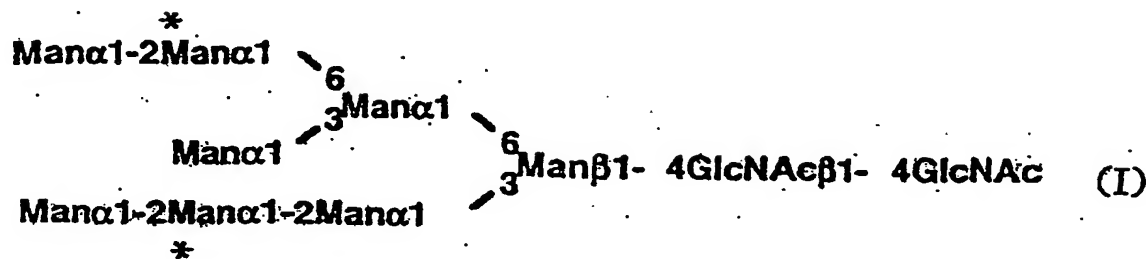


wherein Man represents mannose, GlcNAc represents N-acetylglucosamine, and * represents a site capable of being phosphorylated, as an Asparagine-linked sugar chain, in the cultured product;

collecting the glycoprotein from the cultured product; and
recovering the oligosaccharide from the collected glycoprotein.

8. (Amended) A process for producing a glycoprotein, comprising the steps of:
culturing the yeast mutant according to [any one of claims 1 to 6] claim 1, in a
medium;

producing and accumulating a glycoprotein containing an oligosaccharide represented by formula (I):

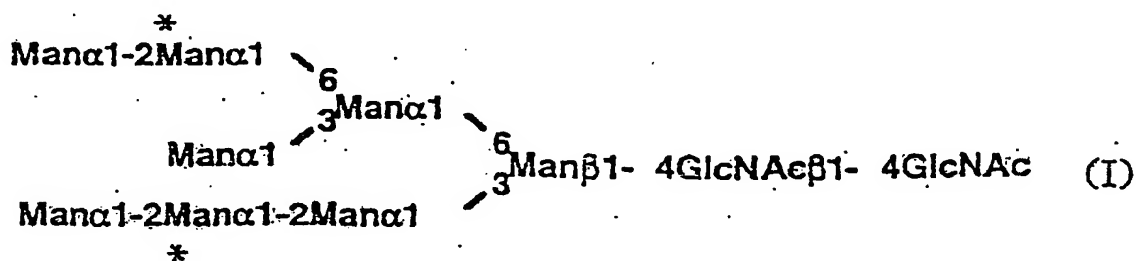


wherein Man represents mannose, GlcNAc represents N-acetylglucosamine, and * represents a site capable of being phosphorylated, as an Asparagine-linked sugar chain, in the cultured product; and

collecting the glycoprotein from the cultured product.

9. (Amended) A process for producing a glycoprotein, comprising the steps of:
culturing the yeast mutant according to [any one of claims 1 to 6] claim 1, which has
been transformed with a recombinant plasmid containing a gene coding for a mammalian-
derived Asparagine-linked glycoprotein in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide represented by formula (I):



wherein Man represents mannose, GlcNAc represents N-acetylglucosamine, and * represents a site capable of being phosphorylated, as an Asparagine-linked sugar chain, in the cultured product; and

collecting the glycoprotein from the cultured product.

11. (Amended) A yeast mutant in which at least one gene associated with biosynthesis of a mammalian type sugar chain is introduced into the yeast mutant according

to [any of claims 1 to 6] claim 1.

12. (Amended) A process for producing an oligosaccharide, comprising the steps of:

culturing the yeast mutant according to claim [10 or] 11 in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide as an Asparagine-linked sugar chain in the cultured product;

collecting the glycoprotein from the cultured product; and

recovering the oligosaccharide from the collected glycoprotein.

13. (Amended) A process for producing a glycoprotein, comprising the steps of:

culturing the yeast mutant according to claim [10 or] 11 in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide as a Asparagine-linked sugar chain in the cultured product; and

collecting the glycoprotein from the cultured product.

14. (Amended) A process for producing a glycoprotein, comprising the steps of:

culturing the yeast mutant according to claim [10 or] 11, which has been transformed with a recombinant plasmid containing a gene coding for a mammalian-derived Asparagine-linked glycoprotein, in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide as an Asparagine-linked sugar chain in the cultured product; and

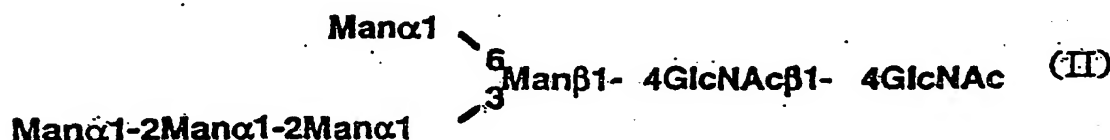
collecting the glycoprotein from the cultured product.

17. (Amended) The yeast mutant according to claim 15 [or 16], wherein the auxotrophic mutation trait is selected from ura3 mutation, his3 mutation, leu2 mutation, ade2 mutation, trp1 mutation, and can1 mutation.

21. (Amended) A process for producing an oligosaccharide, comprising the steps of:

culturing the yeast mutant according to [any one claims 15 to 20] claim 15 in a medium;

producing and accumulating a glycoprotein containing an oligosaccharide represented by formula (II):



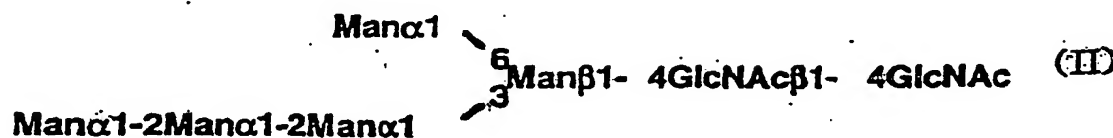
wherein Man represents mannose and GlcNAc represents N-acetylglucosamine, as an Asparagine-linked sugar chain, in the cultured product;

collecting the glycoprotein from the cultured product; and

recovering the oligosaccharide from the collected glycoprotein.

22. (Amended) A process for producing a glycoprotein, comprising the steps of:
Culturing the yeast mutant according to [any one of claims 15 to 20] claim 15 in a medium;

Producing and accumulating a glycoprotein containing an oligosaccharide represented by formula (II):



wherein Man represents mannose and GlcNAc represents N-acetylglucosamine, as an Asparagine-linked sugar chain, in the cultured product; and
collecting the glycoprotein from the cultured product.

25. (Amended) A yeast mutant in which at least one gene associated with biosynthesis of a mammalian type sugar chain is introduced into the yeast mutant according to [any of claims 15 to 20] claim 15.

26. (Amended) A process for producing an oligosaccharide, comprising the steps of:
culturing the yeast mutant according to claim [24 or] 25 in a medium;
producing and accumulating a glycoprotein containing an oligosaccharide as an Asparagine-linked sugar chain in the cultured product;
collecting the glycoprotein from the cultured product; and
recovering the oligosaccharide from the collected glycoprotein.

27. (Amended) A process for producing a glycoprotein, comprising the steps of:
culturing the yeast mutant according to claim [24 or] 25 in a medium;
producing and accumulating a glycoprotein containing an oligosaccharide as an Asparagine-linked sugar chain in the cultured product; and
collecting the glycoprotein from the cultured product.

28. (Amended) A process for producing a glycoprotein, comprising the steps of:
culturing the yeast mutant according to claim [24 or] 25, which has been transformed with a recombinant plasmid containing a gene coding for a mammalian-derived Asparagine-linked glycoprotein, in a medium;
producing and accumulating a glycoprotein containing an oligosaccharide as an Asparagine-linked sugar chain in the cultured product; and
collecting the glycoprotein from the cultured product.